



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,761	03/24/2004	Jeffrey P. Armstrong	031383-9083-01	4276
23409	7590	05/09/2007	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP			DRODGE, JOSEPH W	
100 E WISCONSIN AVENUE			ART UNIT	PAPER NUMBER
Suite 3300			1723	
MILWAUKEE, WI 53202				
MAIL DATE		DELIVERY MODE		
05/09/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/807,761	ARMSTRONG ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Joseph W. Drodge	1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 15 March 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 1-12 are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 1204,0704.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, "the oil" lacks antecedent basis, independent claim 1 only refers to "fuel".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2,4-7 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Koethe patent 6,360,730. Koethe discloses fuel-conditioning system for jet fuel all loaded on, or at least closely associated with a skid or platform (column 3, lines 37-40), and comprising: fuel source and inlet, outlet to engine (both column 3, lines 41-54), inlet cleaners and other separators and purifiers as various filter(s) and water-removing separators, chillers/compressor(s) (column 7, lines 1-3 and column 8, line 36-column 9, line 28), and additional filter(s) and other purifiers (filters and other purifiers at column 7, lines 33-36; column 8, lines 5-14 and 47-58 and column 9, lines 1-3 and 32-40).

For dependent claims: for claim 2, the inlet cleaner may include filters, coalescence devices and other separators (see prev. cited text); for claim 4, a fuel/oil

separator (various of the filters and dryers in forementioned text inherently remove any oil); for claim 5, a temperature-controlled valve to selectively divert fuel to a cooler (discussion of temperature chiller 180 and control unit 182 and associated controlled circulation infers a valve, see column 8, lines 25-36 and column 9, lines 32-40); for claims 6-10, multi-stage chiller including at least two stages, drains, heat-exchangers (column 8, line 37-column 9, line 28 regarding stages 184 and 186 & heat exchangers 85 and 87 of column 13, lines 8-28; the filter dryer 214/column 9, lines 1-3 and “super-water separator of column 9, lines 37-38 inherently associated with drains), recycling of heat between stages and refrigerant heat exchangers (see cited text bridging columns 8-9); for claim 11, a bypass/recirculating loop (column 9, lines 18-22, and for claim 12, the various forementioned filters and other separators operable to purge various contaminants from the fuel being purified.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koethe in view of Provost patent 5,722,229. Claim 3 differs in requiring the compressor to have a variable-speed drive. However, Provost teaches such drive with a compressor (columns 2-3). It would have been obvious to one of ordinary skill in the art to have utilized such variable speed drive in the Koethe system, in order to maintain highly accurate control of heat exchange temperatures.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koethe in view of Seagle patent 6,019,817. Claim 8 additionally requires an activated carbon filter in treating fuel oil, although Koethe discloses an adsorption unit at column 8, line 11; Seagle teaches such at column 3, lines 45-50 and Table of column 7. It would have been additionally obvious to the skilled artisan to have incorporated such activated carbon unit as an adsorbing means of the Koethe system, in order to maintain a highly sterilized fuel oil supplied, since fuel oil is susceptible to bacterial contamination.

Application/Control Number: 10/807,761  
Art Unit: 1723

Page 5

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin, can be reached at 571-272-1189. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

May 4, 2007

  
JOSEPH DRODGE  
PRIMARY EXAMINER